Table 3.—Maximum free-air wind velocities (m. p. s.) for different sections of the United States based on pilot balloon observations during August 1946

Section	Surface to 2,500 meters (m. s. l.)					Above 2,501 to 5,000 meters (m. s. l.)					Above 5,000 meters (m. s. l.)				
	Maximum velocity	Direction	Altitude (m) m. s. l.	Date	Station	Maximum velcoity	Direction	Altitude (m) m. s. l.	Date	Station	Maximum velocity	Direction	Altitude (m.) m. s. 1.	Date	Station
Northeast 1 East-Central 2 Southeast 3 North-Central 4 Central 4 South-Central 6 Northwest 7 West-Central 8 Southwest 9	34. 0 24. 1 18. 1 38. 9 29. 7 28. 7 42. 4 22. 7 22. 8	nne. wnw. w. w. sw. sw. nw. sse.	1, 904 2, 500 2, 448 2, 472 2, 005 1, 386 1, 143 1, 888 1, 846	3 10 11 7 12 13 7 3 2	Nantucket, Mass Nashville, Tenn Birmingham, Ala Williston, N. Dak Dodge City, Kans Oklahoma City, Okla Ellensburg, Wash Grand Junction, Colo Albuquerque, N Mex.	39. 1	wnw. nw. wnw. wsw. w. nw. sw. w.	4, 112 5, 000 5, 000 4, 625 4, 237 4, 493 5, 000 4, 667 3, 595	9 8 10 8 9 30 6 16 30	Columbus, Ohio Louisville, Ky Birmingham, Ala Bismarck, N. Dak Moline, Ill Little Rock, Ark Missoula, Mont Rock Springs, Wyo Las Vegas, Nev	61. 0 60. 0 39. 2 63. 5 66. 0 44. 4 62. 5 55. 0 45. 2	n. wsw. w. n. wnw. wnw. wsw. sw.	11, 314 13, 070 9, 304 14, 792 14, 666 12, 686 17, 949 13, 650 14, 066	12 24 30 1 29 29 29 28 30	Nantucket, Mass. Hatteras, N. C. Atlanta, Ga. Marquette, Mich. Springfield, Mo. Tulsa, Okla. Great Falls, Mont. Oakland. Calif. Fresno, Calif.

Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, and northern Ohio.
 Delaware, Maryland, Virginia, West Virginia, southern Ohio, Kentucky, eastern Tennessee, and North Carolina.
 South Carolina, Georgia, Florida, and Alabama.
 Michigan, Wisconsin, Minnesota, North Dakota, and South Dakota.
 Indiana, Illinois, Iowa, Nebraska, Kansas, and Missouri.

RIVER STAGES AND FLOODS FOR AUGUST 1946

C. R. JORDAN

Precipitation during August was again spotty, with amounts averaging more than twice the usual amounts on the New England coast and in sections of Florida, Texas, Arizona, Colorado, Missouri, and Illinois. It was dry in the States along the Pacific coast and in the northern and eastern sections of the country, except in northern Michigan, New England, northern Florida, and the southern parts of Georgia and Alabama.

There was no widespread flooding during the month, but local floods caused considerable damage in the vicinity of

St. Louis, Mo., and in southern Maine.

Local flood in southern Maine.—An intense storm on August 27, centered over York, Maine, producing an estimated 8 inches of rain between sunset and midnight that resulted in flooding of York Beach and small streams of the area around York. Tides were above normal at the time, which interfered with natural run-off and aggravated flood conditions.

Flash flood in St. Louis region.—About the middle of August phenomenally heavy rains occurred over portions of the Osage, Gasconade, and Meramec Basins, extending eastward over St. Louis and southern Illinois. Total precipitation ranged from 6 to more than 16 inches over a period of 3 or 4 days; total rainfall for August was the greatest of record in some parts of Missouri. Property damage was heavy in the St. Louis area and several persons lost their lives. Flash floods were reported in the Lake of the Ozarks region and in the Gasconade and upper Meramec River Basins. The Missouri River exceeded flood stage slightly at St. Charles, Mo. The Mississippi River at, and for some distance below, the mouth of the Missouri rose rapidly, but the stream did not reach flood stage.

Western Gulf of Merico drainage.—Heavy rains fell over the lower-central sections of the Nueces, San Antonio, and Guadalupe Rivers from August 28-31. Incomplete reports indicate that 6 to 10 inches of rain fell over a strip 100 miles long by 30 to 40 miles wide, crossing the waterMississippi, Arkansas, Louisiana, Oklahoma, Texas (except El Paso), and western

sheds northward from Three Rivers, Tex., to Luling, Tex. The heaviest fall reported was 11.82 inches at Chestohowa, Tex. Heavy overflow resulted along the San Antonio River from Falls City to Goliad and also along the upper Atascosa River, a tributary of the Nueces. No record stages occurred and losses were relatively small.

FLOOD STAGE REPORT FOR AUGUST 1946

[All dates in August unless otherwise specified]

River and station	Flood	Above floo dat		Crest 1		
	stage	From-	То—	Stage	Date	
ATLANTIC SLOPE DRAINAGE						
Cape Fear: Lock No. 2, Elizabethtown,	Feet			Feet		
N. C. Waccamaw: Conway, S. C.	20. 7	26 31	(P) 28	20.8 7.6	27 Sept. 3	
EAST GULF OF MEXICO DRAINAGE						
Apalachicola: Blountstown, Fla	15	{ 2 7	4 13	16. 2 17. 6	.3	
Choctawatchee:	-	i 1			10	
Geneva, Ala	23 12	7 7	9 11	26. 5 14. 0	8	
Tombighee: Lock No. 3	33	7	12	41.6	9	
Lock No. 1	31	9	12	31.6	10-11	
mississippi system						
Upper Mississippi Basin						
Meramec: Sullivan, Mo	11	16	16	15.0	16	
Missouri Basin		İ				
Solomon: Beloit, Kans Osage: La Cygne, Kans Osage:	18 25	26 14	28 15	20. 2 25. 5	27 15	
Warsaw, Mo	31	13	17	35. 2	14	
Lakeside (Bagnell Dam), Mo St. Thomas, Mo	60 23	13 14	20 18	63. 9 31. 5	15 15	
Gasconade: Jerome, Mo	15 25	14 16	16 16	21. 4 25. 3	15 16	
WEST GULF OF MEXICO DRAINAGE						
Cibolo Creek: Falls City, Tex	26	29	29	32. 5	20	
San Antonio: Goliad, Tex Guadalupe: Gonzales, Tex Nueces: Three Rivers, Tex	35 20 37	31 30 31	(9)	22. 4	31	

¹ Provisional.
2 Continued at end of month.